

DEC 20 2006

Application No.: 10/721531
Docket No.: AD6935USNA

Page 3

In the Claims

Please add new claim 19 and amend claims 1 to 13 and 15 to 18 without prejudice as follows:

1. (Currently amended) A thermoplastic elastomer ~~(TPE)~~ composition comprising crosslinked polyvinylbutyral ~~(PVBX)~~ and a thermoplastic polymer, wherein the thermoplastic polymer is a continuous phase of the ~~TPE~~ thermoplastic elastomer composition and wherein having dispersed therein the elastomeric PVBX crosslinked polyvinylbutyral is dispersed as a discrete phase in the continuous phase of the thermoplastic elastomer composition.
2. (Currently amended) The composition of Claim 1 wherein the crosslinked polyvinylbutyral ~~PVBX~~ is present in an amount of from about 25 wt% to about 95 wt%, based on the total weight of the thermoplastic elastomer composition.
3. (Currently amended) The composition of Claim 2 wherein the crosslinked polyvinylbutyral ~~PVBX~~ is present in an amount of from about 50 wt% to about 90 wt%, based on the total weight of the thermoplastic elastomer composition.
4. (Currently amended) The composition of Claim 3 wherein the crosslinked polyvinylbutyral ~~PVBX~~ is present in an amount of from about 75 wt% to about 90 wt%, based on the total weight of the thermoplastic elastomer composition.
5. (Currently amended) The composition of Claim 1 wherein crosslinked polyvinylbutyral ~~PVBX~~ is the product of the crosslinking reaction between modified polyvinylbutyral ~~PVB~~ and crosslinking agents selected from the group consisting of: polycarboxylic acids or functional equivalents thereof; diisocyanates; and diisocyanate oligomers.

Application No.: 10/721531
Docket No.: AD6935USNA

Page 4

6. (Currently amended) The composition of Claim 1 wherein the continuous phase is comprises at least one thermoplastic polymer selected from polymers in the group consisting of: polypropylenes; polyethylenes; polyvinylchlorides; polystyrenes; polyamides; polycarbonates; poly(acrylic acid); polyacrylates; poly(methy methacrylates); styrenic copolymers; polyvinylidene chlorides; polyesters; polyacetals; copolyesters; and polysulfones.
7. (Currently amended) The composition of Claim 6 wherein the continuous phase is comprises polypropylene or polyvinylchloride.
8. (Currently amended) The composition Claim 7 wherein the continuous phase is comprises polypropylene.
9. (Currently amended) The composition of Claim 1 wherein the thermoplastic polymer is present in an amount of from about 75 wt% to about 5 wt%, based on the total weight of the thermoplastic elastomer composition.
10. (Currently amended) The composition of Claim 9 wherein the thermoplastic polymer is present in an amount of from about 50 wt% to about 10 wt%, based on the total weight of the thermoplastic elastomer composition.
11. (Currently amended) The composition of Claim 10 wherein the thermoplastic polymer is present in an amount of from about 25 wt% to about 10 wt%, based on the total weight of the thermoplastic elastomer composition.
12. (Currently amended) A process for preparing a thermoplastic elastomer composition comprising a PVBX-elastomer dispersed in a thermoplastic polymer continuous phase comprising the step of using a crosslinking agent in a crosslinking reaction to crosslink a modified non-blocking polyvinylbutyral ~~PVB~~ composition in the presence of a thermoplastic polymer to form crosslinked polyvinylbutyral PVBX

Application No.: 10/721531
Docket No.: AD6935USNA

Page 5

as a dispersed elastomer in the thermoplastic polymer phase, wherein the thermoplastic polymer is a continuous phase of the thermoplastic elastomer composition and wherein the crosslinked polyvinylbutyral is dispersed as a discrete phase in the continuous phase of the thermoplastic elastomer composition.

13. (Currently amended) The process of Claim 12 wherein the crosslinking agent is an agent selected from the group consisting of: polycarboxylic acids or functional equivalents thereof; diisocyanates; and diisocyanate oligomers.
14. (Original) The process of Claim 13 wherein a catalyst is used to catalyze the crosslinking reaction.
15. (Currently amended) A process for preparing a thermoplastic elastomer composition comprising a PVBX elastomer dispersed in a thermoplastic polymer continuous phase comprising the steps of: (1) combining polyvinylbutyral PVB, a thermoplastic polymer, and a polyvinylbutyral PVB-modifying agent; (2) modifying the polyvinylbutyral PVB in the presence of the thermoplastic polymer to form a modified non-blocking polyvinylbutyral PVB/thermoplastic polymer mixture and (3) using a crosslinking agent to crosslink the modified non-blocking polyvinylbutyral PVB/thermoplastic polymer composition to form crosslinked polyvinylbutyral PVBX as a dispersed elastomer in the thermoplastic polymer phase, wherein the thermoplastic polymer is a continuous phase of the thermoplastic elastomer composition and wherein the crosslinked polyvinylbutyral is dispersed as a discrete phase in the continuous phase of the thermoplastic elastomer composition.
16. (Currently amended) An elastomeric crosslinked polyvinylbutyral composition (PVBX) obtained by a process comprising the steps: (1) heating PVB in the presence of a modifying agent to obtain a non blocking PVB composition (2)

Application No.: 10/721531
Docket No.: AD6935USNA

Page 6

~~heating the modified PVB composition in the presence of a PVB crosslinking agent and a catalyst, wherein the conditions are sufficient for a crosslinking reaction to take place between PVB and the crosslinking agent, to obtain the elastomeric PVB~~the process of claim 12.

17. (Currently amended) An article prepared from the ~~TPE~~thermoplastic elastomer composition of Claim 1.
18. (Currently amended) The article of Claim 17 wherein the article is a hose, a tube liner, a seal, a sheet, a belt, a wire and cable jacket, a wheel, a shoe sole, a film, or a grip.
19. (New) An elastomeric crosslinked polyvinylbutyral composition obtained by the process of claim 15.